F H W A REGION NO.	STATE	FED. AID PROJ. NO.	SHEET NO.	TOTAL SHEETS
3	MD			

PROJECT DESCRIPTION

GENERAL

THIS PROJECT INVOLVES THE MODIFICATION OF THE EXISTING FULL–TRAFFIC–ACTUATED SIGNAL AT MD 150 AND BENGIES ROAD IN BALTIMORE COUNTY. MD 150 IS ASSUMED TO RUN IN AN EAST–WEST DIRECTION.

INTERSECTION OPERATION

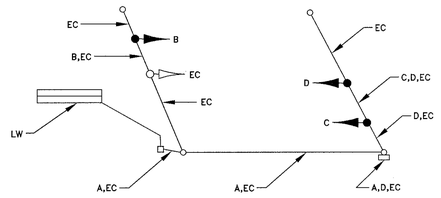
THE INTERSECTION CURRENTLY OPERATES IN A NEMA THREE–PHASE, FULL–TRAFFIC ACTUATED MODE, WITH AN ALTERNATE PEDESTRIAN PHASE ACROSS THE EAST LEG OF MD 150.

THE INTERSECTION OPERATION WILL BE REVISED TO INCLUDE AN EXCLUSIVE–PERMISSIVE LEFT TURN PHASE FOR EASTBOUND MD 150.

CONTROLLER REQUIREMENTS

THE EXISTING FULL–TRAFFIC–ACTUATED, EIGHT–PHASE CONTROLLER HOUSED IN A POLE MOUNTED CABINET WILL BE USED. A FOUR–CHANNEL TIME–DELAY–OUTPUT LOOP DETECTOR AMPLIFIER WILL BE INSTALLED INTO THE EXISTING CABINET.

WIRING DIAGRAM



WIRING KEY

- A } 2–CONDUCTOR ELECTRICAL CABLE (ALUMINUM SHIELDED)
- B } C } 5–CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- D } 7–CONDUCTOR ELECTRICAL CABLE (NO. 14 A.W.G.)
- EC } EXISTING CABLE
- LW } LOOP WIRE (NO. 14 A.W.G.)

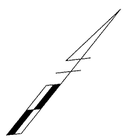
NOTE: UNLESS OTHERWISE NOTED, ALL EXISTING WIRING WILL BE USED

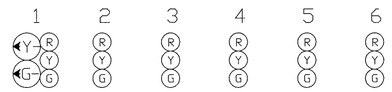
EQUIPMENT LIST "A"

A. EQUIPMENT TO BE SUPPLIED BY THE SHA

QUANTITY	DESCRIPTION
1 EACH	8 IN./12 IN., ONE–WAY, FIVE–SECTION (R,Y,YA,G,GA) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE HANGER FOR SPAN WIRE MOUNTING AND TUNNEL VISORS.
2 EACH	8 IN., ONE–WAY, THREE–SECTION (R,Y,G) TRAFFIC SIGNAL HEAD WITH ADJUSTABLE HANGER FOR SPAN WIRE MOUNTING AND TUNNEL VISORS.
11 S.F.	SHEET ALUMINUM SIGNS TO CONSIST OF : – 1 EACH R10–12 SIGN (36 IN. x 42 IN.) SPAN WIRE MOUNT
1 EACH	FOUR–CHANNEL, TIME DELAY OUTPUT, LOOP DETECTOR AMPLIFIER.

PHASE CHART





PHASE 1 + 6	G/G	G	R	R	R	R	
1 + 6 CHANGE	G/Y	G	R	R	R	R	
PHASE 2 + 6	G	G	G	G	R	R	
2 + 6 CHANGE	Y	Y	Y	Y	R	R	
PHASE 4	R	R	R	R	G	G	
4 CHANGE	R	R	R	R	Y	Y	
PHASE 4 ALT.	R	R	R	R	G	G	
PED CLEAR	R	R	R	R	G	G	
4 ALT. CHANGE	R	R	R	R	Y	Y	
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	DESCRIPTION
1001	1 EACH	MAINTENANCE OF TRAFFIC
5005	80 L.F.	24 IN. WHITE PERMANENT PREFORMED PAVEMENT MARKING TAPE
8010	80 L.F.	FURNISH AND INSTALL STEEL SPAN WIRE – 1/4 IN. DIAMETER
8011	3 EACH	INSTALL SIGNAL HEAD
8022	160 L.F.	FURNISH AND INSTALL SAW CUT FOR SIGNAL (LOOP DETECTOR)
8024	10 L.F.	FURNISH AND INSTALL 1 IN. LIQUID TIGHT FLEXIBLE NON–METALLIC CONDUIT FOR DETECTOR SLEEVE
8043	520 L.F.	FURNISH AND INSTALL LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 A.W.G.)
8044	170 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE– 2 CONDUCTOR ALUMINUM SHIELDED (NO. 14 A.W.G.)
8047	50 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE– 5 CONDUCTOR (NO. 14 A.W.G.)
8048	70 L.F.	FURNISH AND INSTALL ELECTRICAL CABLE– 7 CONDUCTOR (NO. 14 A.W.G.)
8057	11 S.F.	INSTALL OVERHEAD SIGN
8067	1 EACH	USE EXISTING DISK AND AS–BUILT TRAFFIC CONTROL DEVICE

REVISIONS	APPROVALS	REVISIONS
	ASSISTANT DIVISION CHIEF	
	ASST. DISTRICT ENGINEER, TRAFFIC	
	CHIEF, TRAFFIC ENGINEERING DESIGN DIV.	
	DIRECTOR, OFFICE OF TRAFFIC & SAFETY	

MARYLAND DOT – STATE HIGHWAY ADMINISTRATION
Office of Traffic & Safety
TRAFFIC ENGINEERING DESIGN DIVISION

GENERAL INFORMATION SHEET
MD 150 AND BENGIES ROAD

DATE: 1–28–96	DRAWN BY: T. ZAYDEL	F.A.P. NO.		PLAN SHEET NO.:	SHEET NO.
SCALE: NONE	DESIGNED BY: T. ZAYDEL	S.H.A. NO.	SHA NO: 95555TS06 9035	TS–1487C GI	____ OF ____
APPROVED BY:	CHECKED BY: K. SCHMID	COUNTY	BALTIMORE		